Certification Overview
This certification validates the ability to perform intermediate skill level tasks in installing, configuring, maintaining and troubleshooting Dell EMC PowerEdge MX Server products.

Certification Requirements
To complete the requirements for this certification you must:

1. Achieve one of the following Associate level certifications*
   - Associate - PowerEdge Version 1.0
   - Associate - PowerEdge Version 2.0
   - Dell Certified Associate – PowerEdge
   - Dell Certified Professional – PowerEdge
   - Specialist – Implementation Engineer, PowerEdge Version 1.0
   - CompTIA Server+

2. Pass the following Implementation Exam
   - DES-4421 Specialist - Implementation Engineer, PowerEdge MX Modular Exam

Note: These details reflect certification requirements as of April 26, 2019.

The Proven Professional Program periodically updates certification requirements. *Please check the Proven Professional CertTracker website regularly for the latest information and for other options to meet the Associate level requirement.
Overview
This exam is a qualifying exam for the Specialist - Implementation Engineer, PowerEdge MX Modular track.

This exam focuses on installing, configuring and managing the Dell EMC PowerEdge MX server products.

Dell Technologies provides free practice tests to assess your knowledge in preparation for the exam. Practice tests allow you to become familiar with the topics and question types you will find on the proctored exam. Your results on a practice test offer one indication of how prepared you are for the proctored exam and can highlight topics on which you need to study and train further. A passing score on the practice test does not guarantee a passing score on the certification exam.

Products
Products likely to be referred to on this exam include but are not limited to:
- PowerEdge MX Platform Server Components
- OpenManage Enterprise Modular (OME-E)
- PowerEdge MX Platform Networking Components

Exam Topics
Topics likely to be covered on this exam include:

MX-Series Introduction (10%)
- Describe MX7000 hardware chassis components and numbering schemes
- Describe MX7000 compute and storage sled components
- Describe MX5016s storage sleds and configurations

MX7000 Management (38%)
- Describe the MX Chassis Management Architecture and multi-chassis management groups
- Describe key features of OME-M and how OME-M differs from OME
- Describe storage sled management, Fabric C, mapping drives, and drive/enclosure assigned configuration
- Describe use of slot profiles, daisy chains, simplification, and consolidation, logs, and the iDRAC Service Module
- Describe how to perform firmware updates
- Describe use of key features of iDRAC, touching on considerations specific to MX Modular, including resetting iDRAC
- Explain usage and benefits of the Lifecycle Controller
- Describe nature, use, and benefits of Redfish; topics may include operational model, tree structure, RESTful API, available commands

MX Installation and Configuration (18%)
• Explain the power-on process for the chassis and sleds
• Explain the initial setup on an MX7000 including use of the left rack ear LCD panel
• Describe the concepts for initial chassis configuration using the Chassis Deployment Wizard
• Describe use of compute sleds, including location and supported operating systems

MX Networking (20%)
• List minimum networking requirements based on capabilities of various MX7000 models
• Describe the supported fabrics for Ethernet switches, taking into consideration various modes
• Describe the differences between Full Switch mode and SmartFabric Mode
• Describe how to perform an initial out-of-box setup using OME-M and OS 10 CLI
• Describe the administrative functions available when two or more chassis are interconnected
• Describe switching features on MX switches in Smart Fabric mode using OME-M

MX Troubleshooting (14%)
• Describe how to use OME-M to collect logs, review status and alerts, and check system health
• Describe troubleshooting procedures to resolve hardware issues

The percentages after each topic above reflects the approximate distribution of the total question set across the exam.

Recommended Training
The following curriculum is recommended for candidates preparing to take this exam.

Dell Technologies Employees:
Please complete one of the following courses

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<th>Mode</th>
<th>Available</th>
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<td>Dell EMC PowerEdge MX Modular Platform Installation, Implementation and Administration</td>
<td>ES181SVR00151</td>
<td>Virtual Instructor-Led</td>
<td>4/8/19</td>
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<tr>
<td>Dell EMC PowerEdge MX Modular Platform Installation, Implementation and Administration (On Demand)</td>
<td>ES182SVR00518</td>
<td>On Demand</td>
<td>8/29/19</td>
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Dell Technologies Partner and Customer audiences:

Please complete one of the following courses

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<td>ESSVRP02318</td>
<td>Instructor-Led up 10 students with Virtual Labs (On Site)</td>
<td>4/8/19</td>
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The Proven Professional Program periodically updates exams to reflect technical currency and relevance. Please check the Proven Professional website regularly for the latest information.